BC Transit

# Annual Report

1990 - 1991

92-04162/

Lieutenant-Governor in Council

Sir:

It is my privilege to forward to you the 1990/91 financial statements and annual report of BC Transit.

Yours sincerely,

Rita M. Johnston
Minister Responsible

The Honorable
Rita M. Johnston
Minister of Transportation and Highways,
Province of British Columbia,
Victoria, B.C.

Madam:

I have the honor to transmit the 1990/91 annual report of BC Transit.

Yours sincerely,

Stuart M. Hodgson
Chairman

# Table of Contents


A Message from the Minister — 5

Board of Directors — 6

The Chairman's Report —

The Vancouver Regional Transit Commission —

The Victoria Regional Transit Commission —

Small Communities Transit Systems Committee —

Executive Staff and Corporate Officers —

The President's Message —

Corporate Performance and Profile —

Commitment to Customer Service —
- *Safety First*
- *Rider Satisfaction*
- *Reliable Service*
- *Bus Lanes, HOV Lanes, Queue Jumpers and Park &*
- *Rapid Transit Advisory Committees*
- *Lift-Equipped Buses Introduced*

Commitment to Employees — 17
- *Attitude Survey*
- *Orientation Program*
- *New Focus on Training*
- *Driver's Compartment Improvements*
- *Trolley Repair Improvement Program*
- *Bus Radio System*
- *Exemplary Safety Records*

Commitment to the Environment — 21
- *Transit Goes Gre*
- *Emphasis on E*
- *NOx/VOCs Com*
- *Natural Gas E*
- *Hydrogen Fue*
- *High Emission-C*
- *Victoria Focuses on*
- *Small Community Co*

Vancouver Regional Transit System — 25
- *Record Ridership*
- *Service Improvements*
- *The Bus Fleet Expands*
- *Facilities Planning*
- *Multi-Directional Transfer Introduced*
- *Study on Potential for Small Buses*
- *Road and Traffic Issues Affecting Transit Service*
- *SkyTrain*
- *Seabus*
- *HandyDART*

Rapid Transit for Greater Vancouver — 29
- *Whalley*
- *Richmond*
- *Expo Line*

Victoria Regional Transit System — 31
- *New Buses Arrive*
- *Recycle and Renew*
- *Major Planning Initiative*
- *Transit Information on Line*
- *CUTA and APTA Awards*
- *handyDART*

Small Community Systems Program — 35
- *Conventional Systems Expand Service*
- *New Systems Introduced*
- *System Highlights*
- *Terrace Wins Accessibility Award*
- *Community Involvement in Transit*
- *Continued Strong Performance*
- *People Serving People*

BC Transit Programs — 36

BC Transit Fleet — 39

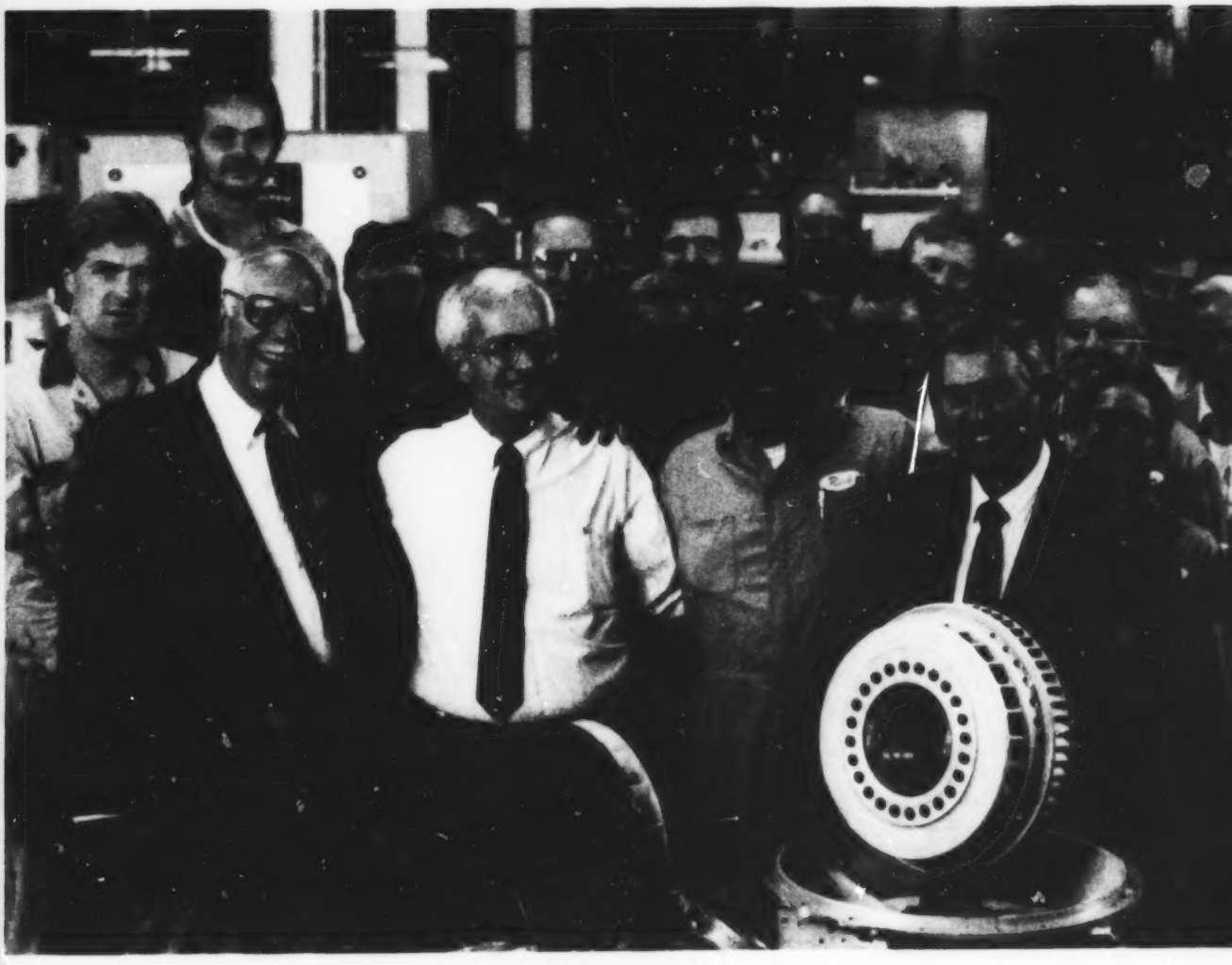
Financial Summary — 40

Performance Summary — 41

Consolidated Financial Statements — 43
- *Report of Management*
- *Auditors' Report*
- *Consolidated Balance Sheet*
- *Consolidated Statement of Revenue and Expenditures and Accumulated Net Revenue*
- *Consolidated Statement of Contributed Surplus*
- *Consolidated Statement of Changes in Financial Position*
- *Statement of Changes in Regional Transit Funds*
- *Notes to Consolidated Financial Statements Year Ended March 31, 1991*


On the cover: The Honorable Pitt M. Johnston, minister of transportation and highways, and BC Transit chairman, Stuart M. Hodgson, with one of the Vancouver Regional Transit System's 21 new articulated buses.

*BC Transit's mission is: "to enhance the social and economic life of the communities it serves by providing safe, reliable, environmentally sound, effective public transit."*



BC Transit chairman, Stuart Hodgson (left, front), joins Burnaby Transit Centre personnel at the Burnaby Overhaul shop.

# A Message from the Minister

Nineteen-ninety was an historic year. We celebrated 100 years of public transit. In that century, transit pioneers constructed the groundwork that has given us one of the best transit systems in North America.

As we move into the second century, the need for better and more comprehensive transit in British Columbia is an issue – and an opportunity – facing us all. There is an increased demand for public transit made evident by the public's growing awareness for the environment.

In spite of changing economic conditions, populations and communities continue to grow – and so does the number of urban vehicles. Congestion, a concern for the environment, and the desire for greater mobility are all key factors in the transit challenge for the future.

The government's Transportation Plan for British Columbia makes it very clear what people want in their urban communities: fast, efficient, dependable transit. The Transportation Plan stresses the need for alternative means of moving people, and BC Transit is dedicated to that need.

The first major step toward meeting the challenges of the second century was taken in July 1989 when the government announced a billion dollar rapid transit construction program.

The program, which is now being implemented, will see a vital transit network linking all major regions of the Lower Mainland. Construction of the guideway that will take SkyTrain to Whalley Town Centre by late 1993 is now well under way. Private developers who derive substantial economic benefits from SkyTrain, and should help pay the costs, have made major financial contributions to stations. SkyTrain capacity will be enhanced by the addition of new and expanded rapid transit cars.

Studies, along with the important public consultation processes, are taking place for building rapid transit to Lougheed Mall to service the Coquitlam and northeast region, and between Vancouver and Richmond to service people living in south-central Vancouver, Richmond, Delta, Ladner, and parts of Surrey, plus Vancouver International Airport.

In addition, a fleet of articulated SuperBuses will be boosting capacity in late 1991 on existing services in the northeast region of the Lower Mainland, and a comprehensive study on the existing SeaBus services could pave the way for a third SeaBus in the next few years.

Public transit is in demand in all areas. Ridership on buses, SeaBus, SkyTrain, and handyDART have all escalated in the past year, as this annual report will show.

BC Transit, and the government of British Columbia, realize that transit is fundamental to a vigorous economy and the quality of life. Transit, by providing fast, efficient, dependable service, provides an alternative for people in communities and regions, works towards a healthier, greener environment, and acts as a catalyst for economic development.

The challenges of the second century are clear and so is our mission.

Hon. Rita M. Johnston
*Minister Reponsible*

Stuart Hodgson,
*Chairman of the Board*

Gordon Campbell,
*Vancouver*

Eric Clarke,
*Victoria*

Frank Carson,
*Victoria*

Murray Coell,
*Saanich*

Jackie Drysdale,
*Rossland*

J. Murray Dykeman,
*North Vancouver*

Don Lanskail,
*West Vancouver*

Don Ross,
*Surrey*

James Stuart,
*Kelowna*

William Vogel,
*White Rock*

This past year, the corporation took advantage of BC Transit's successful centennial year to review its history from the very beginning, the years of progress and the many achievements of Transit's family. Over the past hundred years, BC Transit has continued to provide, under sometimes difficult circumstances, a reliable service for the people of British Columbia.

As we begin transit's second century, we do so with a much better appreciation and understanding of our goals and objectives in meeting ever-increasing demands to provide even better all-around transit service.

New values and changing attitudes demand corresponding changes to our way of life. British Columbians can no longer afford to romanticize about their province being a living paradise populated by people with a never-ending supply of resources in an area whose air, water and land remain in pristine condition.

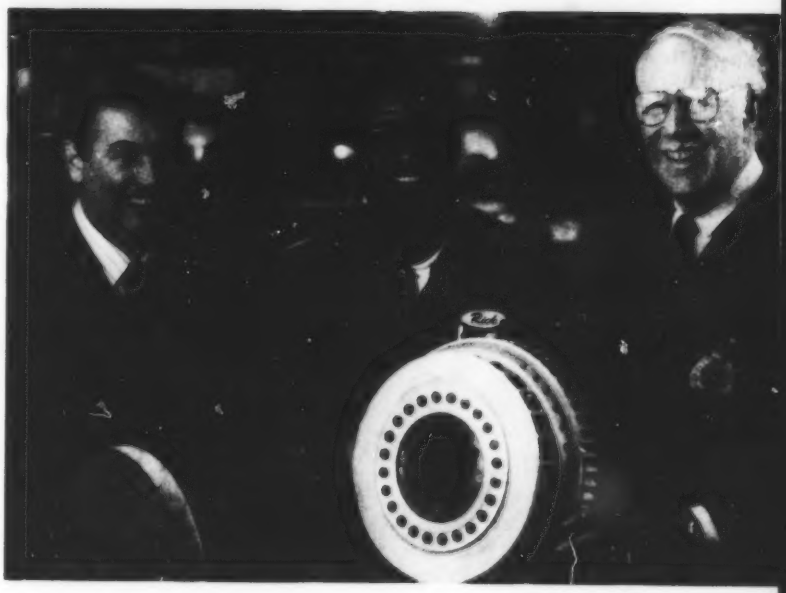
Our population is increasing rapidly and our communities are growing steadily. In order for society to function effectively, we must allow its infrastructure and services to expand accordingly. It is important when planning for the future to revisit, from time to time, the past for the purpose of identifying the shoals and reefs in order to chart a successful course for the years ahead.

This past year, we have taken the time to remember how, in the beginning, streetcars and Interurbans were the backbone of the transit service. By the end of the Second World War, buses and trolleys fulfilled this function. It was only during the past decade that light rail was reintroduced in the Lower Mainland.

Provincial government ministers realize that the best approach to moving people is a balanced approach. As a result, new equipment is being introduced at all levels of the corporation.

Work is well under way in the introduction of a multi-million dollar radio program which will provide instant communication between operators, maintenance crews, supervisors and security. State-of-the-art 40-foot buses continue to enter the service every month and 60-foot articulated buses will make their appearance later this year. SkyTrain will be responding to its increasing role in BC Transit service by installing many new light rail cars before the end of 1991.

In this report, BC Transit's family – made up of the Board of Directors, the President, senior management, head office staff, the commissions, the various properties, the operators, maintenance crews and support staff – will tell you in words and pictures the important part they are playing in improving the equipment, schedules and service in order to meet the ever-increasing demand as we move into the 21st century.



Left to right: superintendent maintenance, Burnaby Overhaul, Alec Dawson; mechanic, Rick Jones; BC Transit chairman, Stuart Hodgson.

Government leaders and concerned citizens realize how fragile our environment is. People must be persuaded to get out of their cars and use public transit. The unfortunate problem is that people do not necessarily live in the vicinity of their work. We are aware of the many challenges we face in seeking viable solutions, and everyone at BC Transit is committed to doing the best job possible.

I sincerely believe by the middle of this decade that BC Transit service will be the best in the country; and by the end of the year, as good as, if not better than, any other transit property in the Western Hemisphere.

Stuart M. Hodgson, OC
*Chairman*

## The Vancouver Regional Transit Commission

**J. Murray Dykeman, Chairman**

The Commission consists of locally elected representatives of the 18 municipalities and three electoral areas within the Vancouver Regional Transit System. The mayor of Vancouver is a member in accordance with the BC Transit Act. All other members are chosen, based on geographic areas, by the minister responsible for transit, then appointed through an order of the lieutenant-governor in council.

In consultation with municipalities and the public, the Commission prepares plans, sets fares, and determines service and performance standards for the Lower Mainland. The Commission also makes recommendations to the authority, respecting the annual operating and capital budgets for the Vancouver Regional Transit System.

Ridership in the Vancouver Regional Transit System service area increased by more than nine per cent to 123 million passengers, and demand for service also increased dramatically. In response to this increased demand, the Vancouver Regional Transit Commission approved a seven per cent service increase this past year for fiscal 1991/92 to meet existing needs as well as further increased demands for conventional transit. A 15 per cent increase in service hours was approved for handyDART.

Eighty-six lift-equipped buses began service on 22 routes, as recommended by the Commission.

For 1990/91, the Commission maintained the current level of local taxes collected from the hydro levy at $1.60 per month and the gasoline tax at three cents per litre. Fares remained the same as the previous year.

## The Victoria Regional Transit Commission

**Murray Coell, Chairman**

The Victoria Regional Transit Commission is comprised of five locally elected mayors and two aldermen, in accordance with the BC Transit Act. These members are appointed by the minister responsible for transit through an order of the lieutenant-governor in council.

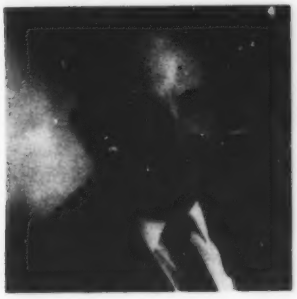
In consultation with municipalities and the public, the Commission prepares plans, sets fares, and determines service and performance standards for the Victoria region. The Commission also makes recommendations to the authority, respecting the annual operating and capital budgets for the Victoria Regional Transit System.

With the co-operation of the provincial government, capital funding was increased and 11 new vehicles were added to the transit fleet, along with upgrading in the garage and bus refurbishment areas.

Transit service was expanded and an all-time record level of ridership was achieved. Ridership was up more than nine per cent to 16 million.

The Commission implemented the third year of its five-year financial strategy. Adult fares were maintained at $1. Fares are among the lowest for any major Canadian system. The local taxes collected through a levy on B.C. Hydro accounts were not increased.

## Small Communities Transit Systems Committee



**James Stuart, Chairman**

Reporting to the Board of Directors, this Committee reviews and recommends the annual operating and capital budgets for the Small Community Transit Systems Program, and deals with policy matters relating to this program.

The Committee is comprised of: Mayor James Stuart of Kelowna, chairman; Jackie Drysdale of Rossland; and Eric Clarke of Victoria.

The Committee has been successful in ensuring that the transit needs of the non-metropolitan centres in British Columbia are adequately met. In 1990/91, the Committee secured funding for five new transit systems — in Mission, Comox Valley, Squamish, Terrace, and 100 Mile House — and expansion to 13 others.

Ridership in the Small Communities grew by almost five per cent during the year under review, to almost seven million.

# Executive Staff and Corporate Officers

*Corporate Officers*

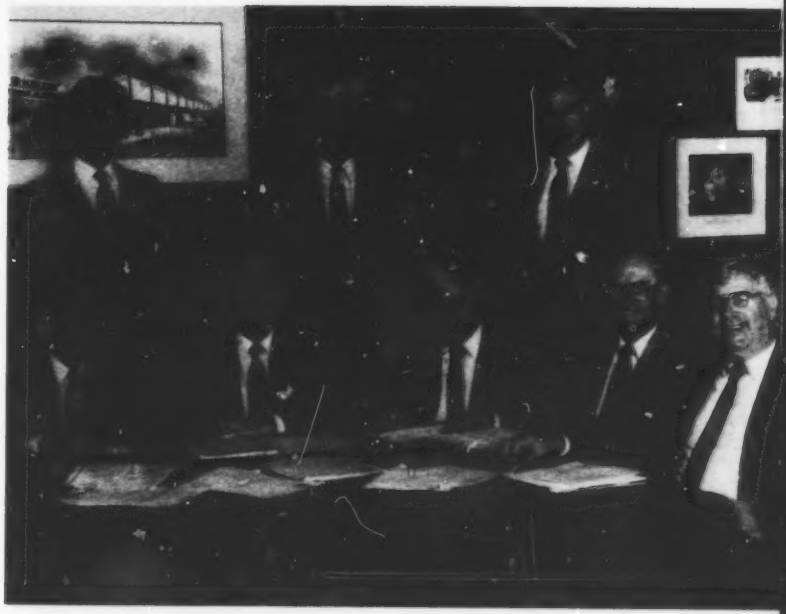
Stuart Hodgson
*Chairman*

Mike O'Connor
*President and Chief Executive Officer*

Victor Irving
*Corporate Secretary*

Rick Krowchuk
*Vice-President Finance and Chief Financial Officer*

Allan Williams
*Corporate Counsel*



*Executive Staff*

Standing, left to right: Bob Lingwood, General Manager, Victoria and Small Communities; John Cawood, Vice-President, Corporate Services; Victor Irving, Corporate Secretary. Seated, left to right: Rick Krowchuk, Vice-President Finance and Chief Financial Officer; Mike O'Connor, President and Chief Executive Officer; Heinz Schweinbenz, General Manager and Chief Operating Officer, Greater Vancouver; Larry Ward, President and Chief Executive Officer, BCRTC; Robert Tribe, Vice-President, Design, Construction and Project Management.

During the year under review, BC Transit experienced a dramatic increase both in ridership and in the demand for transit service. All three modes in the Vancouver Regional Transit System – bus, SeaBus and SkyTrain – witnessed substantial increases in ridership, giving the system the highest growth rate of any major transit system in Canada.

The Victoria Regional Transit System experienced its largest year-to-year increase ever and established a new ridership record. The Small Community Systems Program continued to grow with a record number of expansions and new systems.

To keep pace with this unprecedented ridership growth and the increasing demand for public transit, new buses arrived throughout the year, and the Vancouver Regional Transit Commission approved a seven per cent increase in conventional Lower Mainland transit service for 1991/92, the largest expansion since the mid-1970s.

BC Transit never loses sight of the fact that its success as a corporation depends upon its ability to meet people's needs – the needs of BC Transit passengers and employees. The corporation is people moving people.

These needs must be coupled with the delivery of a cost-effective, reliable, safe service. To this end, we must strive to make the best use of taxpayers' and transit riders' money. We constantly work to improve our productivity and – through comparisons with other transit agencies – to ensure that we strive for excellence in the areas important to our employees, customers and taxpayers.

The 1990s will be a decade of significant growth for transit. Our population is aging and the problems of traffic congestion and air pollution will continue to challenge transit to provide transportation solutions. We must ensure that we improve and increase service effectively.

Mike J. O'Connor,
*President*
*and Chief Executive Officer*

# Corporate Performance and Profile

BC Transit is the provincial Crown corporation responsible for urban transit systems throughout the Province of British Columbia. Its responsibilities include the conventional and handyDART systems in Victoria and Vancouver, and 24 conventional bus systems, 12 handyDART systems, and 17 paratransit systems in other B.C. communities.

The corporation is responsible for planning, funding and marketing the Vancouver and Victoria regional transit systems, as well as operating 622 diesel buses, 244 trolley buses, and the two SeaBuses in the Vancouver region, and 124 buses in the Victoria region.

The 114-vehicle SkyTrain system is operated by the British Columbia Rapid Transit Company Ltd., under contract with BC Transit. The 28 buses in the West Vancouver Blue Bus system are operated by the West Vancouver Municipal Transportation Department, under contract to BC Transit.

Throughout British Columbia, in co-operation with local communities, BC Transit is responsible for the implementation, planning, funding and marketing of 52 conventional, handyDART, and paratransit systems. Most of these systems are operated by private contractors in partnership with local governments and BC Transit.

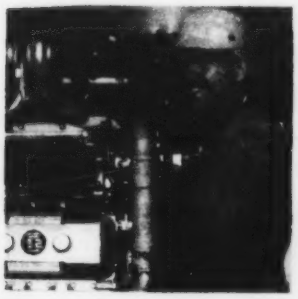
**Above: boarding a new MCI Classic in downtown Vancouver.**
**Pages 12 and 13, left to right: SkyTrain attendant, Michael Ehlers at a platform emergency cabinet; mechanic, David Walsh.**
**Page 14, top to bottom: operator, Alan Williams; trolley coach mechanic, Alberto Ma.**

*"It is the policy of BC Transit to prevent injuries to persons and damage to property. People are our most important asset, their safety our greatest responsibility."*

Doug Hartman, *accident prevention supervisor*

## Commitment to Customer Service

BC Transit is committed to the service of its external customers – riders, taxpayers and governments – and internal customers – the Transit employees. The corporation works consistently to create programs designed to enhance both the corporation's ability to serve people, and the ability of people within the corporation to serve Transit customers.



### *Safety First*

BC Transit's customers are among the safest transit passengers in North America. With more than 145 million revenue passengers carried in 1990, passenger safety improved a further 3.4 per cent over the previous year. Since 1980, our passenger incident rate has been reduced by more than 50 per cent.

Safety practices and employee safety training programs are regularly evaluated to ensure safety conditions on BC Transit vehicles and properties are the best they can be. As a result, both employee and passenger safety records have improved dramatically since program evaluation began.

Since 1971, for example, the year before the corporation started its Safe Driver Program, a 55 per cent reduction in the collision rate – from 109.1 to 49.3 collisions per million miles operated – has been achieved.

Transit listens to customer concerns and responds. For example, reflective tape was recently added to the handrails of new buses because some passengers found the rails difficult to see.

*Rider Satisfaction*

To ensure that BC Transit Lower Mainland services meet the needs of users, the corporation contracts a market-research firm to conduct weekly telephone interviews with transit users in the Vancouver region. One hundred customers are interviewed each week. During the year under review, an average of 88 per cent of the riders participating in the surveys rated the transit service satisfactory or better.

Satisfaction ratings throughout the year were high for all three modes in the system – SeaBus, SkyTrain and buses. Customers also consistently indicate satisfaction with frequency of service, adherence to schedules and friendliness of personnel.

*Reliable Service*

Transit personnel consistently strive to earn customer approval. This year, staff enabled the system to maintain almost 100 per cent service reliability while increasing province-wide service hours by 5.2 per cent over the same period a year ago.

Service hours in the Vancouver Regional Transit System rose from 2.9 million during 1989/90 to three million during 1990/91, and we maintained a reliability record of more than 99 per cent. Victoria and the Small Community Systems also maintained almost 100 per cent reliability, with service hours rising from 373,000 to 395,000 in Victoria and from 303,000 to 328,000 in the Small Community Systems.

*Bus Lanes, HOV Lanes, Queue Jumpers and Park & Rides*

To further increase the efficiency of transit for our customers and to meet the demand for more efficient transit services, the creation of bus lanes and queue jumpers, high-occupancy-vehicle (HOV) lanes and Park & Ride lots is being expanded as part of the Five-Year Plan in the Vancouver region.

Global concern for the environment is shared by BC Transit and its customers. By making transit an increasingly attractive travel option for our customers, we recognize that we can play a major role in reducing the number of single-occupant vehicles on the road.

During the year under review, BC Transit began service on a bus lane on Clarke Street in Port Moody. This lane allows buses to bypass the queues of traffic waiting to access Barnet Highway in the morning rush. This has reduced morning rush hour travel time by about 10 minutes for buses travelling from Port Coquitlam to Vancouver.

Completion is expected soon on the Burns Road queue jumper at the south end of the Massey Tunnel and a bus lane on the McGill approach to the Second Narrows Bridge.

Work also began on planning for the first high-occupancy vehicle (HOV) project in the region – the Barnet Highway/Hastings Street HOV lane, expected to open in 1993. This is located in the northeast sector of the city, a fast-growing area that needs more efficient people-moving services.

*"The new buses are just terrific. I had a lump in my throat when I got on the first time. I took the bus with my 18-year-old son, for the first time ever."*

**Wheelchair-lift user, Vince Miele, on the first day of lift-equipped bus service**

To complement the HOV lane, BC Transit will upgrade its Barnet Highway bus service to include a SuperBus and SuperExpress route , using articulated buses. These buses will leave from a major transit exchange and Park & Ride lot to be built across the street from Coquitlam Centre shopping mall.

Plans would see the transit exchange completed and articulated buses on the route by the fall of 1991.

Currently, the Ministry of Highways is examining the feasibility of an HOV lane on Highway 1 and a similar study could look at Highway 99. The HOV projects would include additional Park & Ride lots.

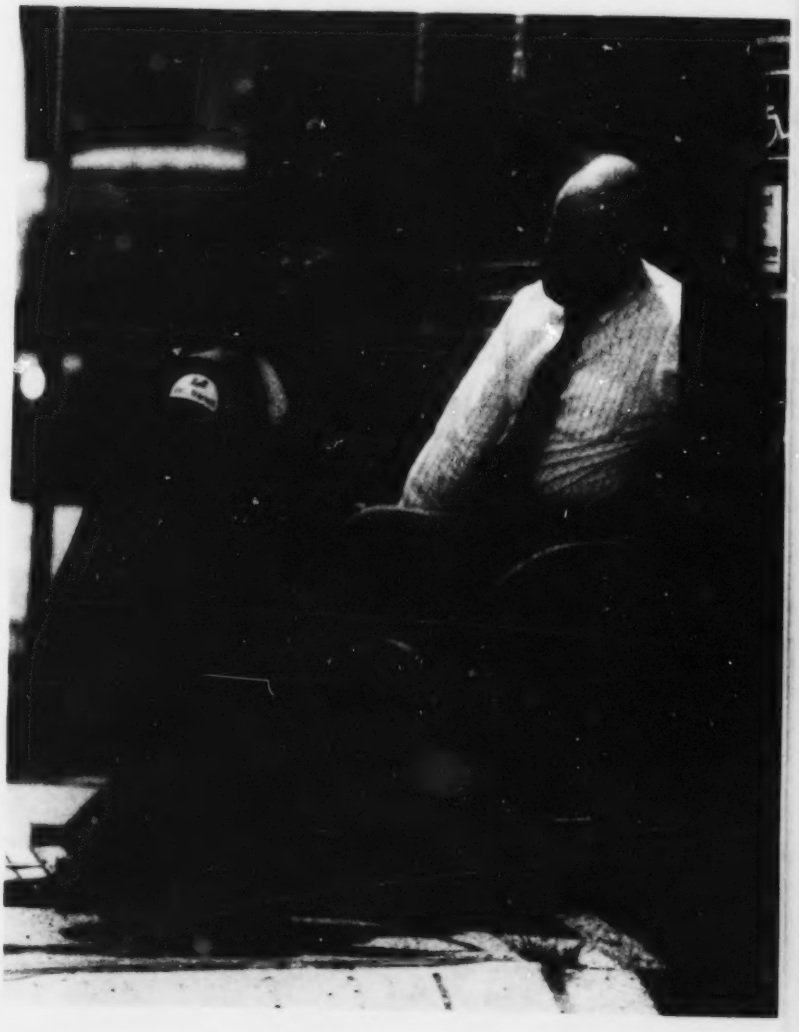
Two new Park & Ride lots opened in the spring of 1991: one at 160th Street and 104th Avenue in the Guildford area of Surrey for 75 cars, served by express buses that operate directly to Scott Road Station; the second in South Surrey at 152nd Street and Cranley Drive, containing space for more than 250 cars. The second lot is served by express buses both to SkyTrain and to Vancouver via Highway 99.

The 1,300-space Scott Road Park & Ride lot, which opened in March of 1990, continues to be filled to capacity on weekdays. This lot will be expanded by up to 900 cars in 1991.

### *Rapid Transit Advisory Committees*

To ensure the needs of the public are met as BC Transit works to expand rapid transit services in the Vancouver Regional Transit System service area, two rapid transit advisory committees have been formed – one to serve the Coquitlam extension and one for Vancouver-Richmond.

The committees, comprised of representatives from throughout the service areas, were established to solicit public participation and to make recommendations to BC Transit as to the best routes and technologies for rapid transit in the system.



Operator, Richard Gladwin, and passenger, Vince Miele, at a lift-equipped bus demonstration.

### *Lift-Equipped Buses Introduced*

On June 1, 1989, it was announced that all new buses for the Vancouver region would come equipped with wheelchair lifts. This was a decision made by the BC Transit Board of Directors in response to a recommendation from the Vancouver Regional Transit Commission and a Custom Transit task force.

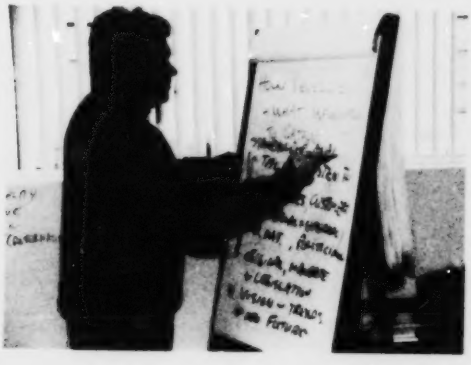
When the first lift-equipped buses began service in the Lower Mainland on September 3, 1990, BC Transit became the first system in Canada to offer accessible conventional transit service.

Lift-equipped service is now offered on 23 Lower Mainland routes (almost 10 per cent of our trips system wide), using 86 lift-equipped buses produced by MCI.

The 131 additional buses scheduled to arrive in 1991 will all be lift-equipped, bringing the fleet total of accessible buses to 217. By 1995, half the diesel bus fleet will be lift-equipped. By 2006, the Vancouver Regional Transit System fleet in its entirety will be wheelchair accessible.

*"The response to the new training opportunities in maintenance has been excellent. Our tradespeople like having the opportunity to stay informed and to expand their technical knowledge."*

Denis Welch, *maintenance instructor, diesel*



## Commitment to Employees

BC Transit's success is largely due to the dedication and expertise of its employees. BC Transit is committed to meeting the needs of these employees, both in the short and long term.

To ensure that each and every employee could help determine the future of BC Transit, the corporation conducted an employee attitude survey, with results reviewed by all employees. The survey identified areas of opportunity and the corporation's strengths and weaknesses.

Overall, the survey showed that BC Transit employees have a high degree of pride and job satisfaction. As well, they're willing to contribute ideas and have a high expectation of service delivery to the customer, our passengers.

The survey results are now being used in all corporate endeavors. BC Transit will continue to work to build on the corporate strengths identified in the survey, and to correct problems and deficiencies.

*"I enjoy my work, and I believe the majority of my customers enjoy their ride"*

Rob Landau, *transit operator*

Because BC Transit recognizes that employees are its greatest resource, the corporation will continue to look to its employees for ideas. To date, employees have shown a valuable willingness to take part in shaping Transit's future. For example, operator Trev Le Feuvre of Victoria was instrumental in developing a program for the visually impaired. While driving transit coaches, Trev noticed how difficult it was for visually impaired passengers to determine whether the bus approaching was the coach they needed. After corresponding with various transit systems that use similar programs, Trev approached BC Transit with a proposal that BC Transit endorsed. Trev then worked closely with the local CNIB office to further design and develop his proposal: a book of braille-embossed, numbered route cards. The visually impaired customer simply flips the cards to show the route number of the desired bus. The booklet is small enough to fit into a pocket or purse, yet clear enough for drivers to see.

The program has been enthusiastically received both by the CNIB and BC Transit, and is now being tested throughout the Victoria Regional Transit System.

### *Orientation Program*

To ensure all new Lower Mainland employees get a comprehensive introduction to BC Transit and a warm welcome to the company, a new Employee Orientation Program was introduced in October.

The tour takes new employees to a variety of worksites, via buses, SeaBus and SkyTrain, the three modes of Vancouver's integrated transit system.

### *New Focus on Training*

One of the key factors expressed in the Employee Attitude Survey was that BC Transit employees want training and that they appreciate educational opportunities.

BC Transit is committed to ensure not only that all employees receive

Opposite: SeaBus controller/mate, Judy Varey, in the wheelhouse. This page, top to bottom: electronic communication mechanic, Bill Thurston, in the new lab of the electronics complex; winners of the 1991 BC Bus Roadeo.

the training they require, but that all training offered is interesting, challenging, directly applicable to the employee's work, and based on the needs expressed by employees themselves.

Many initiatives were set up this year to meet this goal. As a result: joint union/management committees are now addressing training issues; the Management Development Department is expanding its training services, providing increased training support to enable managers and supervisors to serve the training needs of their staff; and training programs for operators and maintenance personnel are being expanded, based on input from transit operators and maintenance staff.

In Victoria this year, every transit operator was given a full day of in-house training on current issues, plans for the future, security, bus radios and safety topics. The session provided an opportunity for operators to ask questions and gain valuable information about their growing transit system. The system's fleet is expected to nearly double in size over the next five years.

### *Driver's Compartment Improvements*

Based on input from transit operators and safety committee members, dozens of improvements were made to Lower Mainland and Victoria buses during the year under review, and ongoing improvements are scheduled.

A redesign of the driver's compartment in Victoria buses – to make the operator's work station larger and more comfortable – led to a program that will see all BC Transit buses equipped with Recaro seats, power steering and a new ergonomically designed driver's compartment. These changes have been incorporated into the specifications for all new buses and are being retrofitted into existing equipment.

To ensure that the comfort of operators would be maximized, the new work station design was reviewed by a physiotherapist who paid particular attention to brake and power-pedal angles. Each step of the redesign continues to be monitored by employees.

SeaBus, too, was fitted with Recaro seats – in the wheelhouse.

### *Trolley Repair Improvement Program*

TRIP – the Trolley Repair Improvement Program – was implemented this year to improve the service reliability of the trolley bus fleet in Vancouver. From the start, TRIP's success has relied on input from BC Transit's trolley bus operators and maintenance personnel. Together, they have directed program content and are responsible for dozens of creative solutions implemented to date. These solutions will ensure increased efficiency of trolley-bus operation for our future.

### *Bus Radio System*

Preparations for the installation of the first bus radios for the BC Transit Bus Radio Data Acquisition System took place throughout the year. When the system is complete, every one of the more than 900 buses in BC Transit's Lower Mainland fleet will be linked to Transit Control for both voice- and data communications.

The system will greatly enhance the ability of operators and supervisors to communicate with Transit Control and to access help in emergency situations. It is expected to deter vandalism, make riding the buses safer for operators and passengers, and increase service reliability.

A bus radio system is also being implemented in Victoria.

### *Exemplary Safety Records*

BC Transit emphasizes the health and safety of employees and the travelling public in all endeavors. The corporation's safety record is one of the best of all North American transit systems. It's an exemplary record the corporation works consistently to maintain and improve.

During the past 10 years, BC Transit employees have achieved substantial improvements in all aspects of safety. This performance has earned the corporation 16 major national and international awards for traffic, passenger and employee safety.

A new program for maintenance personnel, recognizing the location with the best improvement in its safety record compared with the previous year, was implemented in 1990.

## Commitment to the Environment

BC Transit takes a proactive approach to environmental protection. Not only does the corporation keep abreast of advances in emission control devices and cleaner modes of propulsion, it also works to lead the industry in developing new, more environmentally sound transportation alternatives.

Suburban commuting by car uses eight times more energy than transit and creates about 15 times as much air pollution.

BC Transit remains on the leading edge of environmental innovations for tomorrow's transit, while offering an attractive alternative to today's transportation pollution problems.

BC Transit's use of electric vehicles is among the highest of any transit system in North America. Both SkyTrain and the Vancouver system's 244 trolley buses are powered by electricity. Pictured at left is the Metrotown SkyTrain station. Above: Operator Stan Sharma and "Ms. Greenley" on location during filming of the Go Green television ads. Pages 22 and 23, top to bottom: SkyTrain; on track; linemen Jack Bullinger, left, and Scott Brandlund; the Go Green campaign on the road.

During the year under review, BC Transit launched a major environmental initiative designed to improve air quality in the Lower Mainland by replacing single-occupant vehicle trips (SOVs) with transit or carpool trips (HOVs). Three partners – Environment Canada, the Ministry of Transportation and Highways, and the Greater Vancouver Regional District – joined BC Transit in this initiative, called the Go Green program.

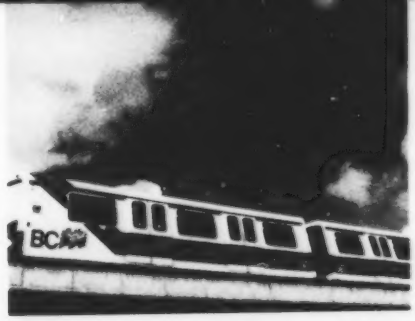
The primary objective of the program was to increase awareness that tailpipe emissions are the single largest source of air pollution, and to encourage residents to replace a portion of their SOV trips with HOV trips.

During 1990/91, BC Transit launched complementary internal environmental programs: TOP and an employee Go Green Committee.

TOP, an acronym for Transit Options Program, is a monthly transit pass program available to commuters only through their employers. It is designed to make it easier for people to leave their cars at home and choose bus, SeaBus or SkyTrain as their primary means of travel to and from work.

Every full BC Transit bus carries as many people as would normally travel in 30 cars. TOP offers employers a perfect opportunity to support transit – the green alternative to travel in single-occupant vehicles (SOVs) – and to add their commitment to that of other businesses making a concerted effort to protect the environment. Expressions of interest in TOP have already been received from more than 200 employers.

The employee Go Green Committee is comprised of personnel from throughout the corporation. Input is invited from all employees.



The Committee implements environmental initiatives for the workplace and employee commutes.

Programs to recycle office paper proved a great success this year in Vancouver and Victoria.

### Emphasis on Electricity

BC Transit's use of electric vehicles is among the highest of any transit system in North America. SkyTrain and our 244 trolley buses are electrically powered. These vehicles don't pollute the air with exhaust and they don't use fossil fuels. Already, more than 40 per cent of the people who travel to downtown Vancouver during the morning rush hour do so on public transit. Of all commuters to downtown Vancouver, an estimated 80 per cent travel aboard SkyTrain or trolley buses, powered by electricity.

As SkyTrain,and possibly light rail, extend farther into the suburbs, and more diesel buses begin transferring passengers to SkyTrain, rather than travelling into the city, this percentage will increase.

### NOx/VOCs Committee

Concern for the state of our environment is shared by hundreds of public and private agencies throughout British Columbia. BC Transit works with such groups to set up programs that will improve environmental conditions in our province. NOxVOCs is one such effort – a provincial government committee, of which BC Transit is a member. Their goal is to reduce "NOx and VOCs" emissions in the Lower Mainland – nitrous oxides (the major component of acid rain) and volatile organic compounds. Their work to formulate strategies for various government departments and agencies most recently resulted in a recommendation to the Motor Vehicle branch to develop a vehicle emission inspection process for B.C.

### Natural Gas Bus Demo Project

Early in February 1990, the federal government announced support in the amount of $400,000 for a natural gas bus demonstration project. The total cost of the project, which involves converting five buses from diesel to dual-fuel operation and the installation of a high-speed fuelling facility, is $1.1 million.

The project is being co-funded by BC Transit, BC Gas, IMW Industries and Energy, Mines and Resources Canada.

Natural gas is considered by many to be more environmentally friendly, cleaner burning and less expensive than diesel fuel. It is also a natural resource that is abundant in British Columbia. If this pilot project is successful and illustrates the theoretical benefits, more BC Transit buses will be converted, resulting in further operating cost reductions and environmental benefits.

The option to purchase natural gas buses from the manufacturer may also be available in the future. An increasing number of bus manufacturers are

*"The public awareness portion of our Go Green campaign is intended to encourage residents to replace a portion of their single-occupant-vehicle travel with transit."*

Jan Pezarro, *marketing manager*

showing an interest in producing new natural gas buses. In order to compare and evaluate both dual-fuel and mono fuel natural gas bus operation, BC Transit has included one natural gas bus in its order of 110 buses to be delivered in 1991.

The fuelling station was completed during the year under review and will be installed at the Port Coquitlam Transit Centre in May 1992. It is the first high-speed fuelling station ever designed for transit buses and will make the use of natural gas in buses more practical than ever before by allowing them to be fuelled in about the same amount of time it takes to fill a bus with diesel fuel. With old natural gas fuelling technology, it would have taken up to eight hours to fuel each bus.

### Hydrogen Fuel Cells

Preliminary work continued on a new energy source to be tested by BC Transit. The source is based on local technology, is safer than gasoline, and creates water as its only exhaust byproduct. It promises pollution-free generation of energy.

The Ballard Fuel Cell reforms hydrogen and oxygen to produce electricity for propulsion. The only exhaust byproduct in this system is water. To date, the cell has only successfully generated power in stationary operations. Our challenge is to see if energy from a fuel cell can be created on a bus and used for propulsion. This will require tests to determine: safe, economical ways to transform hydrogen; how and where the hydrogen can be stored; whether or not hydrogen can be created and stored on a bus.

The steering committee's goal is to have six buses powered by Ballard fuel cells operating for Victoria's Commonwealth Games in 1994.

### High Emission Control Standards

All new Transit buses are equipped with state-of-the-art emission controls, including electronic ignition control, which reduces harmful emissions.

### Victoria Focuses on the Environment

In Victoria, recycling continues with oil, transmission fluid and office paper on top of the list. The switch to #1 diesel fuel means cleaner burning engines. The system continues to investigate particulate traps and other means of reducing diesel emissions until cleaner alternative fuels become readily available.

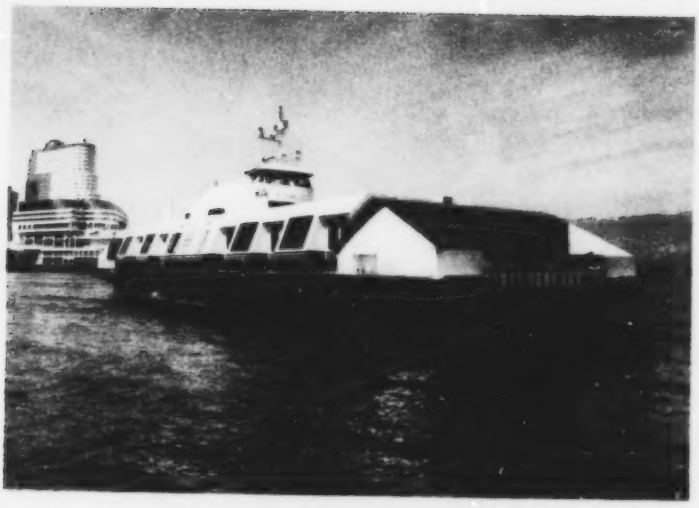
### Small Community Concerns

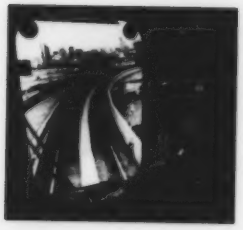
Concern for the environment and the desire for environmental preservation has generated renewed interest in public transit in the Small Communities.

Primarily through its vehicles, the Small Community Systems Program took extra steps during the year under review to provide a more environmentally friendly service. In Nelson, Squamish, and Terrace, and on the Sunshine Coast, smaller vehicles than in the past (minibuses) are being used on new conventional services. These vehicles more closely match vehicle capacity to service demand. In addition, included in the replacement of retired vehicles in the Small Communities are refurbished older vehicles. This refurbishment adds approximately 12 years to the life of each vehicle.

Most systems are now using "diesel 40," a clean, environmentally sensitive diesel fuel that results in fewer emissions. Squamish, Terrace, and Comox Valley have gone one step further with the conversion of their vans and minibuses to propane or natural gas, cleaner burning fuels than diesel.

## Vancouver Regional Transit System





*"With the Trolley Repair Improvement Program improvements, it's not really any one thing that makes the difference – it's everything together. Even the little things like the new transfer cutters make a big difference."*

Ewan Easton, *transit operator*

Opposite: bodyman, Norm Colclough, at work on a TRIP coach. This page, top to bottom: SeaBus; SkyTrain attendant, Colleen Mlink. Pages 26 and 27, clockwise from left: SkyTrain; members of BC Transit's Lower Mainland planning and scheduling division (left to right) – transit engineering technician, Dave Evans; senior transit scheduler, Judie Robertson; transit planner, Helen Cook; manager accessible transit, Bruce Chown; manager service planning, Glen Leicester; boarding SeaBus.

The Vancouver Regional Transit System serves the largest transit service area in Canada, extending from Lions Bay in the northwest to Langley (Aldergrove) in the southeast, White Rock and the United States in the south, and Port Coquitlam in the northeast. The area covers about 1,500 square kilometres and has a population in excess of 1.4 million.

The transit fleet is multi-modal. It consists of: 650 diesel buses, 244 electric trolley buses, 114 SkyTrain rapid transit cars, two SeaBus catamaran passenger ferries, and 155 handyDART vans. The handyDART vans provide transportation for the disabled.

This year, extension of the service area boundaries to Maple Ridge and Pitt Meadows was approved in principle by the two municipalities, the Vancouver Regional Transit Commission and the BC Transit Board. This was the result of a study conducted outlining future transit options for those communities. The next step toward approval is the preparation of a detailed service plan.

### Record Ridership

The transit system recorded more than 123 million rides during the 1990/91 fiscal year – up nine per cent from 113 million carried in the previous year – and generates more than 40 rides per hour. This is one of the highest ridership rates of any North American city.

SkyTrain ridership alone is up more than 25 per cent this year. The system now carries approximately 105,000 people a day. By light rail standards, this is extremely high ridership. Bus ridership is up seven per cent over last year; SeaBus ridership, two per cent; handyDART ridership, 14.9 per cent.

### Service Improvements

Several major service changes were implemented over the past year: six new bus routes were introduced (the 32 Dunbar/Downtown; 290 Deep Cove/Vancouver; 315 Scott Road Station/Ladner; 335 Fleetwood/Guildford; 480 Steveston/UBC; 509 Walnut Grove/Scott Road Station), and dozens of changes and improvements were made to existing services, based on demand.

*"The new buses will allow for replacement of old vehicles as well as service increases throughout our system. The articulated buses will offer improved comfort and convenience to the residents of the rapidly growing Coquitlam area. In conjunction with the future high-occupancy-vehicle lane, they will truly provide 'SuperBus' service."*

Glen Leicester, *manager service planning*

Significant improvements were made to Sunday service because of the increased number of people using transit on Sundays since the introduction of Sunday shopping. In May of 1990, Sunday improvements to 15 routes throughout the system were introduced. Sunday service levels have grown faster than any other day over the past five years.

Fifteen-minute summer (July and August), Sunday and holiday service on SeaBus was introduced in response primarily to tourist demand. The introduction was a success, so the service will again be implemented in summer this year.

### The Bus Fleet Expands

Eighty-five new 40-foot buses promised in the $35 million enhancement program announced by the provincial government in January 1989 began service in the Lower Mainland. In addition, 21 articulated buses and 110 40-foot buses were purchased from New Flyer Industries, to be delivered in 1991.

### Facilities Planning

As the bus fleet and demand for transit continue to grow, BC Transit looked at various options for expansion of transit facilities. The Board of Directors approved construction of a new Surrey Transit Centre complex.

Construction of the transit centre will begin in 1991. The complex will house both operations and maintenance facilities.

### Multi-Directional Transfer Reintroduced

On November 1, the transfer that allows travel on the Vancouver Regional Transit System, in any direction, for a period of 90 minutes, was reintroduced.

The Commission approved the reintroduction, on a six-month trial basis, at their October meeting.

The transfers allow users to make round trips that can be made within 90 minutes, on a single fare. They also make it easier for transit operators to enforce fare regulations, as there is no need to determine passengers' direction of travel.

Reintroduction of the transfers is a key step toward the goal of simplification of transit system fares for operators and customers.

### Study on Potential for Small Buses

In response to interest from the public and local municipalities, BC Transit began a study on the potential for use of small buses on low-demand routes in rural and very low density areas, or where street systems are narrow and residents have concerns about large buses.

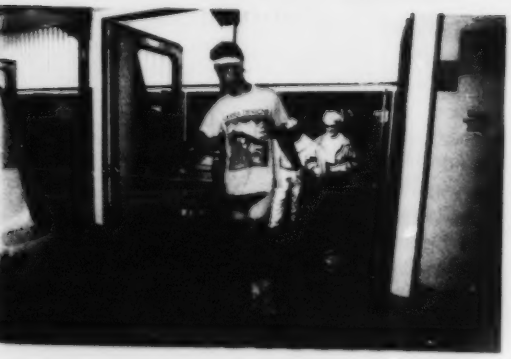
The use of both 30-foot diesel buses and smaller vans or mini-buses is being considered in the study.

In March of 1991, the study was presented to the Vancouver Regional Commission. The Commission directed BC Transit to discuss the use of smaller vehicles with Vancouver Regional Transit

System municipalities and to prepare an implementation plan.

### Road and Traffic Issues Affecting Transit Service

Increasing traffic throughout the Vancouver region has negatively impacted bus service, causing delays that increase operating costs and reduce the overall attractiveness of public transit service. Also, these increased traffic volumes have led to the expression of safety concerns by operators. BC Transit is working with municipalities to increase transit operating efficiency. The corporation is devoting more resources to these concerns than in past years.



*SkyTrain*

SkyTrain, North America's longest, completely automated, driverless rapid transit system, experienced a 25 per cent increase in ridership during the year under review. Total annual boarding passengers increased to 33.1 million. The system now carries more than 105,000 riders per day. Ridership has doubled in the five years since the system opened for service.

This tremendous rise in ridership can largely be attributed to the opening of the new Scott Road SkyTrain station in March of 1990. With the opening, travel by SkyTrain across the Fraser River, between the communities of Surrey and New Westminster, became possible.

Since SkyTrain began service, it has acted as the backbone of BC Transit's integrated, multi-modal transit system and has proven to be a catalyst for billions of dollars in development. Downtown Vancouver, New Westminster, North Vancouver's Lonsdale Quay (connected to SkyTrain via SeaBus) and Burnaby's Metrotown, have all witnessed billions of dollars in development because of their proximity to SkyTrain. Major developments will also complement the coming of SkyTrain to Whalley. The provincial government's July 31, 1989, announcement that SkyTrain would be extended to Whalley triggered a boom for area development proposals that has continued to date.

Work started in early January on the 4.3-kilometre SkyTrain guideway from Scott Road to Whalley Town Centre. The extension is scheduled for completion in 1993.

The dramatic increase in ridership this year stretched system capacity – with the existing fleet of 114 cars – to the limit. A total of 104 cars were required to meet demand, representing 91 per cent of the fleet. This is a fleet-availability factor far above the industry norm for rail operations – 80 to 90 per cent.

An additional 16 SkyTrain cars were purchased to meet this continuing growth in ridership. Delivery of these vehicles will take place during the first quarter of 1991/92.

Ongoing efforts to minimize sound coming from the SkyTrain alignment led to the installation this year of sound-absorbing panels at critical areas along the elevated guideway. This resulted in further reductions to the sound impact on adjacent properties. SkyTrain is now one of the quietest rail rapid transit systems in North America.

SkyTrain operating cost effectiveness showed a continued improvement trend, with the operating cost per boarded passenger declining from $1.03 to $0.92 and the operating cost per car revenue kilometre declining from $1.81 to $1.62.

Customer confidence remains high, with 81 per cent of those surveyed rating the service overall as "good" or "very good."

Above: SeaBus and Lonsdale Quay. Right: handyDART driver, Bill Jackson. Opposite: transit engineer, Hansel Wang, at a Vancouver/Richmond Rapid Transit Project open house.

### SeaBus

The B.C.-designed and built SeaBus passenger ferry recorded yet another year of 100 per cent service, with no unscheduled down time. The number of revenue passengers using the service was up from 2,008,000 in 1989/90 to 2,042,000 during the year under review.

SeaBus is a unique, double-ended catamaran. Two ships, the Burrard Beaver and the Burrard Otter, carry passengers between North Vancouver and downtown Vancouver. Each ship has a capacity of 400, providing a two-way capacity between SeaBus docks in North Vancouver and downtown Vancouver of 3,200 passengers an hour.

Because of both BC Transit's commitment to the environment and the corporation's ongoing efforts to improve customer service, the year saw approval by the Vancouver Regional Transit Commission of changes to SeaBus' bicycle policy. In October, the Commission increased the range of hours during which bicycles can be carried, allowing cyclists to bring their bikes aboard SeaBus during all off-peak hours, and on weekends and holidays. Also, as of December 1, 1990, passengers are no longer charged for their bicycles. Between October and year end, more than 2,000 bicycles had traversed the harbor aboard SeaBus, a 231 per cent increase over the 1989/90 year.

### handyDART

During 1990/91, the regional handyDART fleet was expanded from 138 to 155 vehicles, of which 129 are lift-equipped. The 26,000 registered handyDART users in the Vancouver region received 279,000 annual hours of service, an increase of 10 per cent compared with the 253,000 annual hours of service in 1989/90. Productivity averaged 2.37 rides per hour for an annual total of 662,000 passenger trips. Because of higher productivity and more hours of service, this ridership figure was 15 per cent greater than the 576,000 passenger trips recorded in 1989/90. The total 1990/91 expenditure for handyDART service in the Vancouver region was $9.4 million – an average of $14.18 per passenger trip.

On July 31, 1989, the British Columbia government announced a $1 billion rapid transit program, designed to significantly improve public transportation in the Lower Mainland. The program is moving ahead on all fronts. Construction on the SkyTrain line to Whalley has begun; planning for rapid transit to Richmond and Coquitlam is well under way.

### *Whalley*

The Whalley SkyTrain extension, which includes three stations, will run from Scott Road to Whalley and is scheduled for completion in late 1993.

### *Gateway Station*

Gateway Station will be built at 108th Avenue and 134th Street. On February 18, the Honorable Rita M. Johnston hosted a sod-turning ceremony to mark the beginning of construction of the 4.3-kilometre SkyTrain Project - Phase III, at the future station site. On December 14, BC Transit's Board of Directors approved a lease agreement that will see BC Transit's corporate head offices relocate to Surrey. The new building that will house BC Transit – called Station Tower – will be integrated with the SkyTrain station in the Gateway Development, a massive joint-use project that will include a number of office towers and high-density residential development in a parklike setting.

### *Whalley Central Station*

Whalley Central Station will be constructed on 102nd Avenue, at the site of the existing North Surrey Recreation Centre. This will be the major Whalley Staion. All bus routes will terminate here, at a 14-bay transit exchange.

The Municipality of Surrey envisions the highest levels of development occurring near this station, as part of their town-centre plan.

### *King George Station*

King George station will be located at King George Highway and 100th Avenue. Plans here are for a large, mixed-use development. It is proposed that this station have bus stops and a premium (pay for use) Park & Ride lot to accommodate up to 500 cars. This is the last station on the line.

### *Richmond*

During the year under review, the planning process for a rapid transit line between Vancouver and Richmond proceeded in terms of reducing the number of potential corridors to 10 from 200. The next step will be to select the three best alternatives.

The busway option was eliminated from further discussion, leaving the SkyTrain and light rapid transit technologies still under consideration. In Vancouver, the route will follow either Cambie Street or Arbutus Street. The final choice of route is expected to be made in the fall of 1991.

To ensure public awareness of the program, and maximize opportunities for public input, about 40 public open houses, featuring plans and progress, were held at various times and locations in Vancouver and Richmond.

Formalized public meetings that allow for residents to speak directly to members of the advisory committee overseeing the rapid transit project have also been held throughout Vancouver and Richmond.

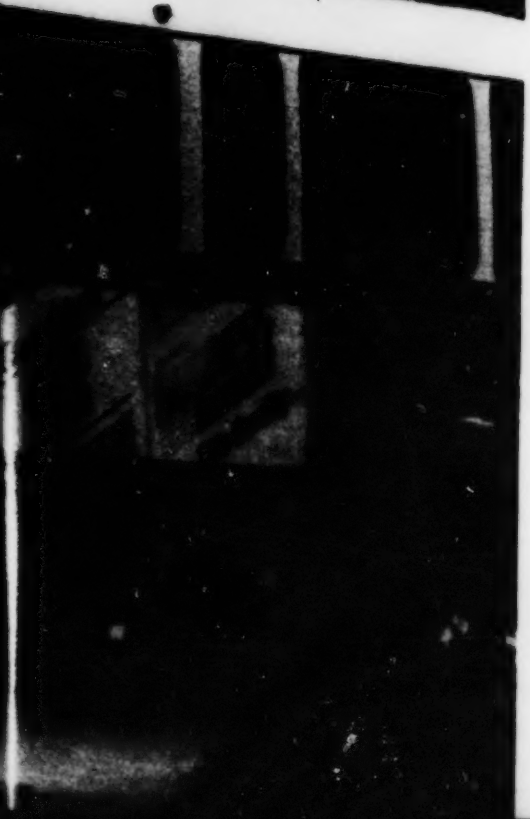
### *Coquitlam*

A SkyTrain extension to Lougheed Mall and planning for a future extension to Coquitlam Centre is included in the billion dollar transit program.

For the Coquitlam extension, three corridors are being studied between the existing SkyTrain line and Lougheed Mall. They include:

- branch at Broadway Station, then east following the BN Railway line and Lougheed Highway to Lougheed Mall
- branch by Royal Oak Station, then following Edmonds through the Cariboo area to Lougheed Mall
- branch at Columbia Station, following Columbia Street and the Brunette Valley to Lougheed Mall.

A preliminary study is looking at ridership for these three options and studying potential impacts through the various neighborhoods. Broad-based studies on costs, travel times, and re-routing of buses to complement rapid transit are also being conducted by an in-house team and consultants.



## Victoria Regional Transit System

Victoria's 124-vehicle regional transit system carried an all-time record 15.9 million passengers in the year ending March 31, 1991, a 9.5 per cent increase over the previous fiscal year. Service increased by 5.9 per cent to 395,000 hours, using 10 additional vehicles in regular service. More than 40 rides per hour were carried, indicative of a very effective service. The system continued to achieve a high level of safe operation with only 18.7 contacts per million miles. It was also very reliable, with 99.95 per cent of scheduled service operated.

The transit system serves 280,000 residents throughout the Capital Region. The market response rate, therefore, was 56.4 rides per capita, up 7.4 per cent from the previous year.

Total expenditures were $24.2 million for the year, with $11.4 million in revenues, giving a recovery ratio of 47 per cent.

The number one priority is to provide high-quality service that is safe and efficiently operated, with a clean fleet and a constant focus on courtesy and service to passengers.

*"I've been working on a braille-embossed route-card system. Our visually impaired passengers can display a card to let operators know which bus they want to catch. The card system will make it a lot easier for these individuals to use our transit system."*

Trev Le Feuvre, *transit operator*

Clockwise from left: Duke Road, Metchosin; CNIB mascot, Seemore, demonstrates Trev Le Feuvre's bus ID cards; transportation planner, Graeme Masterton.

The system took delivery of 10 Orion V buses featuring the locally designed "Victoria Work Station" – the ergonomic driver's compartment utilizing a Recaro seat, tilt/telescopic steering and redesigned instrumentation to reduce operator stress and back strain. The bus also has angled courtesy seats that have proven popular with our seniors and physically challenged customers. The work station design was the outcome of a very successful employee involvement program.

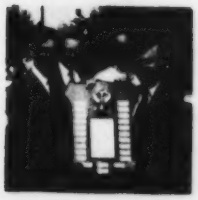
The Maintenance division completed eight coach refurbishments for vehicles 15 to 25 years old. These recycled and renewed buses will now see another 12 or more years of active service. Frame repairs to older Vancouver and Victoria coaches also continued.

The system embarked on a major planning initiative to increase transit's efficiency on Douglas Street with completion of a transit priority study that recommended changing the signal timing at key intersections, removal of some parking meters, "Bus Only" lanes in rush hours and more bus stops downtown. Work with the Ministry of Transportation and Highways continued on the evaluation of transit priority measures and facilities as part of the major Pat Bay Highway and Trans-Canada Highway upgrades. A potential LRT right-of-way (former CNR right-of-way) into downtown was acquired and reserved as a future transit corridor.

Clockwise from above: operators (left to right) Gord Lindsay, Jim Ram, Wayne Mar, Gale Jones, Dave Smith; bodyman, Jeremy Sheldon (left), and mechanic, Brian Nelson, in the coach rebuild shop; confidential secretary, Carol Coll, at a Busline display; general manager, Victoria and Small Communities, Bob Lingwood (left), presents the traffic safety shield to (left to right) operations supervisor, Bill Fryer, operator, Jack Harper, and operator, Harry Rowe.

*"Busline will soon give our customers telephone access to a computerized transit schedule 24 hours a day. The project is an exciting combination of digitized voice technology and computer-driven trip planning, which can be accessed from any touch-tone phone. Better customer service today means more transit passengers tomorrow."*

Chris Foord, *marketing and public relations supervisor*



*Transit Information on Line*

Phase 1 of Busline, BC Transit's automated transit information system, was successfully implemented. The system allows a telephone caller, from a touch tone phone, to work through a "menu" to obtain transit information. The system utilizes digitized voice technology and will supply next-bus information, and have the computer doing trip planning for callers in the near future.

*CUTA and APTA Awards*

The Victoria Regional Transit System was the recipient of two Canadian Urban Transit Association (CUTA) and two American Public Transit Association (APTA) first-place marketing awards for public information products.

*handyDART*

The handyDART network recorded a very successful year in 1990/91. Three new vehicles brought the lift-equipped fleet total to 22. A record 114,000 passengers were carried, an increase of 9.5 per cent. The resulting productivity of 2.5 rides per hour ranks highly in Canada for parallel services operating in metropolitan areas. Total costs were $1.5 million with fares covering 12 per cent. The system, operated under contract by Accessible Transportation Alternatives Ltd., operated 46,000 hours of service, a 20 per cent increase.

Demand for this service is growing rapidly, and new vehicles are at capacity almost immediately. The aging population, increased home support services programs, de-institutionalization and the popularity of Victoria as a retirement destination, will result in continued high demand for handyDART service.

*"Support for transit throughout B.C. has never been higher. The partnership we have with municipalities and operating companies or societies is one of the big reasons for this success. Teamwork is working."*

Steve New, manager, Small Community Systems

# Small Community Systems Program

The year under review saw the greatest service expansions in the history of the Small Community Systems Program. Five new transit systems were also implemented in the Province. This expansion was complemented by the highest cost recovery performance level in the 11-year history of the Program.

### *Conventional Systems Expand Service*

In the 23 conventional transit systems, total program expenditures were $18.7 million, with revenues of $5.1 million, resulting in a cost recovery rate of 27.2 per cent. Ridership rose to 6.9 million revenue passengers. Seven additional buses brought the fleet total to 146 vehicles. Service hours increased by 25,000 to 324,000 for all systems. In the 12 custom and 17 paratransit systems, total program expenditures were $3.46 million, with revenues of $502,000, resulting in a cost recovery rate of 14.5 per cent. Ridership rose by 20 per cent over the previous year to 394,000 revenue passengers, the highest level ever. Fourteen new vehicles brought the fleet total to 84 vehicles. Service hours increased by 30,000 to 111,000 for all systems.

### *New Systems Introduced*

New transit systems include those in the Comox Valley and Squamish, with custom transit in Mission and Terrace and paratransit in 100 Mile House. The extensive list of expansions to existing systems include:

- increased service frequency on the Hart Highway and service to Northwood Pulp in Prince George
- an additional handyDART vehicle in each of Abbotsford-Matsqui, Chilliwack, Kelowna, Nanaimo and Kootenay-Boundary (Trail)
- an additional route through Rutland in Kelowna
- extension of Creston paratransit to Riondel
- extension of Dawson Creek service to Pouce Coupe
- the introduction of Sunday service on the Kamloops custom transit system and a taxi supplement service
- a summer ferry shuttle service in Nanaimo
- extension of conventional service to the North Shore and paratransit service to Kaslo-Argenta on the Nelson systems
- additional service hours on the Terrace conventional system.

### System Highlights

Specific system highlights include:

- a 17 per cent increase in ridership in Campbell River to 273,000 revenue passengers with less than a one per cent increase in service hours
- a cost-recovery rate of 41 per cent in Prince Rupert, maintaining its top-performance position in the Province
- the continued high productivity of the Kamloops custom transit system – the highest in Canada, carrying 5.5 rides per hour
- the strong demand for custom transit in Kelowna, with a 50 per cent increase in service.

The types and organization of these new transit services are designed to achieve the overall transportation requirements of each community. The newly organized transit services in the Comox Valley, Squamish and Terrace provide "integrated" – conventional, custom and paratransit service all managed by one operator – comprehensive and flexible service for community residents. While centring service on the urbanized areas, these systems also provide service to outlying suburban areas and/or surrounding rural communities.

### Terrace Wins Accessibility Award

With the growing seniors' market and greater independence among the disabled population, accessibility is becoming an important area of emphasis for transit service. In 1990, the Terrace Regional Transit System became the first fully-accessible system in Canada and was awarded the 1990 Mobility Award for Innovation in Accessible Transit by the Canadian Urban Transit Authority. This system has now become the model for others in the country.

The planning for further expansions and improvements in accessibility of transit is under way, with the approval of the Vernon Regional Transit Development Plan and preparation of the Nanaimo Regional Transit Development Plan, both covering the years 1991 to

Pages 34 and 35, left to right: the Comox Valley Transit System opens; Steve New (right) congratulates operator, Doug Banner, on the startup of the Squamish Transit System. Pages 36 and 37, clockwise from top left: Chilliwack; Comox Valley; BC Transit Board member, James Stuart (second from left), and general manager, Victoria and Small Communities, Bob Lingwood (third from left), join district dignitaries for the opening of the Squamish Transit System, August 20, 1990.

1995. In addition, feasibility studies for new systems are completed or in the process of being completed, for the Cowichan Valley, Grand Forks, Parksville-Qualicum Beach, Port Edward, Salmon Arm, Smithers and Whistler and specifically for custom transit service in Campbell River and custom/paratransit throughout the Powell River Regional District. For these studies, the proposals concentrate on the size and type of demand exhibited and locally established transit objectives that reflect the unique nature of each community.

### Community Involvement in Transit

In the transit planning process, transit riders and the overall community are consulted before the implementation of new services. Prior to service expansion or final service approval, on-board passenger surveys were conducted in

Mission, Nanaimo, Vernon and Whistler, and general informational displays were presented in the Comox Valley, Kelowna, Salmon Arm and Squamish. In each of these sessions, the public was asked to comment on existing transit service and/or proposed new services. In Nanaimo, the first in a series of more in-depth surveys was conducted on the transportation needs, travelling behaviours and attitudes toward public transit of seniors and post-secondary students, two of the largest and fastest growing transit market groups throughout the Small Community systems.

In addition to increases in service, greater convenience in fare payment options is an issue that is raised frequently in these surveys. As a result, system-wide monthly passes for all fare categories were implemented in Kelowna, Nanaimo, Vernon, Campbell River, Prince George and Kamloops.

Because they are the reason we provide transit service, community residents are invited to join in the celebration of the many achievements and milestones of their transit system. Some events celebrated during the 1990/91 year under review include the conversion to a fully accessible and integrated system and the tenth anniversary of transit in Terrace, the first anniversary of handyDART service in Kootenay-Boundary (Trail), and the inauguration of service in the Comox Valley and Squamish. These were celebrated with reduced fares and other promotions. In the Comox Valley, the first "free" day of service attracted lineups at the bus stops, as community residents waited to be among the first passengers on the system. This resulted in standing loads on that day and continued strong ridership throughout the year. Tenth anniversaries were also recognized – with full community support – in Dawson Creek and Fort St. John.

### Continued Strong Performance

The outcome of our customer-oriented approach to transit has been excellent overall performance in the Small Community Systems Program for the year under review.

### People Serving People

The success of a people-oriented service depends directly upon the commitment of the many people involved. In the Small Communities, these people include the staff of BC Transit, the various municipalities, and the numerous operating companies, as well as those to whom the service is provided: transit riders. The dedication of people such as Lilla Tipton, retiring manager of the Carefree Society in Prince George, and Erma Drabiuk, retiring manager of the North Okanagan Handicapped Association in Vernon, has assured that the primary commitment to service is realized.

*Conventional Bus Service*

Vancouver Region
Victoria Region
Abbotsford-Matsqui
Campbell River
Castlegar Regional
Chilliwack
Comox Valley
Dawson Creek
Fort St. John
Kamloops
Kelowna Regional
Kitimat
Kootenay-Boundary
Maple Ridge
Mission
Nanaimo
Nelson
Penticton
Port Alberni
Powell River
Prince George
Prince Rupert
Squamish
Sunshine Coast
Terrace Regional
Vernon Regional

*Handimat*

(rural areas and smaller communities)

Castlegar Regional
Comox Valley
Cowichan Valley
Cranbrook
Creston
Kimberley
Nakusp
Nelson
Okanagan-Similkameen
100 Mile House
Princeton
Quesnel
Squamish
Summerland
Sunshine Coast
Terrace Regional
Williams Lake

*HandyDART*

(door-to-door transportation for disabled people)

Vancouver Region
Victoria Region
Abbotsford-Matsqui
Alberni-Clayoquot
Chilliwack
Kamloops
Kelowna
Kootenay-Boundary
Maple Ridge
Mission
Nanaimo
Penticton
Prince George
Prince Rupert
Vernon

# BC Transit Fleet

*Vancouver*

| | |
|---|---|
| Diesel buses (including West Vancouver buses) | 650 |
| Electric trolley buses | 244 |
| Rapid transit cars | 114 |
| SeaBus ferries | 2 |

*Victoria*

| | |
|---|---|
| Diesel buses | 124 |

*Small Community Systems*

| | |
|---|---|
| Diesel buses | 146 |

*Maple Ridge*

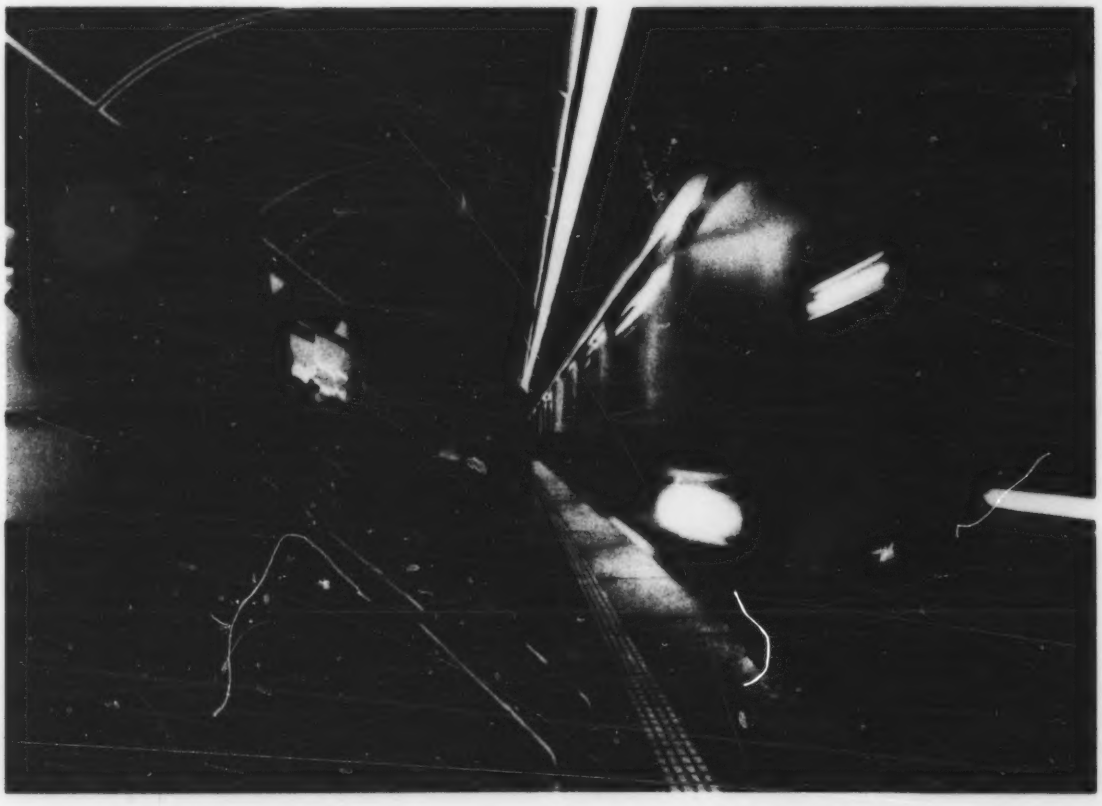
| | |
|---|---|
| Diesel Buses | 3 |

*handyDART*

| | |
|---|---|
| Vancouver | 155 vehicles |
| Victoria | 22 vans |
| Small Communities | 51 vans |
| Maple Ridge | 2 vans |

*Paratransit*

| | |
|---|---|
| Small Communities | 33 vans |



*Operating Revenues and Expenditures*

Fare revenues for the fiscal year ended March 31, 1991, were $138.7 million, compared with $125.8 in the previous year, an increase of $12.9 million (10.2 per cent). The revenue increase results from a nine per cent increase in total provincial ridership (146 million) and a higher average fare per rider. The higher average fare reflects an increased proportion of peak-period riders from the Vancouver region suburbs.

Total expenditures for the year were $464.2 million, compared with $395.8 million last year. The breakdown by regional transit systems was: Vancouver, $415.9 million; Victoria, $25.6 million; Small Community Systems, $22.7 million. Total interest cost increased by $24.9 million in 1990/91, primarily as a result of the opening in mid-March 1990 of the New Westminster/Scott Road phase of SkyTrain.

The provincial government funding contribution increased from $139.5 to $173 million in 1990/91, as a consequence of increased operating costs.

The provincial government also provided $40.3 million in debt servicing assistance, comprised of principal and interest payments on the Province's 50 per cent share of the SkyTrain Vancouver-New Westminster phase, guideway capital costs of $275 million.

Required contributions from the municipalities increased by $18.5 million, as a result of expenditure increases exceeding increases in the fare revenue.

*Capital Expenditures*

Capital expenditures for the year were $88.6 million, consisting of: $47.4 million on SkyTrain projects; $21.4 million on diesel buses; $7.5 million on articulated buses; $12.3 million on other projects.

The SkyTrain costs for the Vancouver-New Westminster phase were finalized during the year, resulting in a favorable variance of $4.9 million against the $854.4 million budget. Total costs (excluding interest) for the phase were $849.5 million.

**Vancouver Regional Transit System**
(excluding Custom Transit Service)

| | 1990/91 | 1989/90 | Per Cent Change |
|---|---|---|---|
| Passengers | 122,788,871 | 112,528,558 | 9.12% |
| Service Hours | 3,033,687 | 2,893,340 | 4.85% |
| Passengers per Service Hour | 40.5 | 38.9 | 4.07% |
| Operating Cost per Passenger | $1.82 | $1.77 | 2.82% |
| Operating Cost per Service Hour | $73.63 | $68.80 | 7.02% |
| Revenue as a Per Cent of Operating Cost | 51.57% | 53.06% | –1.49% |

**Victoria Regional Transit System**
(excluding Custom Transit Service)

| | 1990/91 | 1989/90 | Per Cent Change |
|---|---|---|---|
| Passengers | 15,864,566 | 14,478,763 | 9.57% |
| Service Hours | 394,841 | 372,837 | 5.90% |
| Passengers per Service Hour | 40.2 | 38.8 | 3.47% |
| Operating Cost per Passenger | $1.40 | $1.41 | –0.71% |
| Operating Cost per Service Hour | $56.27 | $54.86 | 2.57% |
| Revenue as a Per Cent of Operating Cost | 47.90% | 48.36% | –0.46% |

**Small Communities Regional Transit System**
(excluding Custom Transit Service)

| | 1990/91 | 1989/90 | Per Cent Change |
|---|---|---|---|
| Passengers | 6,970,960 | 6,659,042 | 4.68% |
| Service Hours | 327,656 | 303,240 | 8.05% |
| Passengers per Service Hour | 21.3 | 22.0 | –3.12% |
| Operating Cost per Passenger | $2.55 | $2.37 | 7.62% |
| Operating Cost per Service Hour | $54.24 | $52.02 | 4.26% |
| Revenue as a Per Cent of Operating Cost | 26.99% | 25.87% | 1.12% |

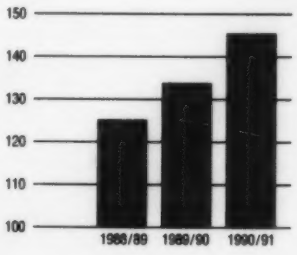
# Performance Summary

The adjacent graphs present six of the key performance measures for BC Transit's total conventional system. As the graphs indicate, system ridership has increased steadily over the last three years, increasing almost nine per cent in the last year. In response to the increased demand for transit service, the corporation provided additional service hours but at a lesser rate than the growth in ridership. This increased the number of passengers carried per service hour and resulted in more efficient utilization of the system.

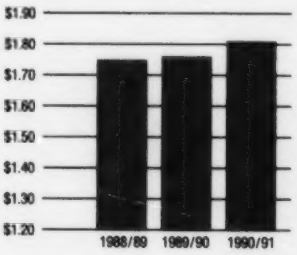
Operating costs per service hour have increased by approximately six per cent per year, due principally to the cost escalations associated with fuel and wages. Operating costs per passenger, however, have remained relatively constant, increasing only about two per cent in the last year. Expressed as a per cent of operating costs, the fare revenues declined slightly from 1989/90 to 1990/91, reflecting the lack of fare increases during the period.

Regional breakdowns of the performance statistics are shown in the tables on the opposite page.

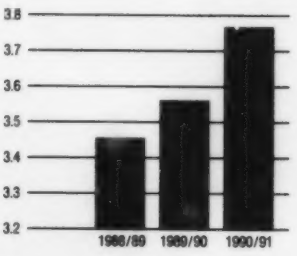
Passengers (millions)



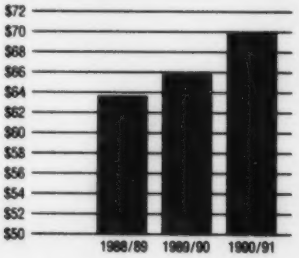

Operating Cost per Passenger



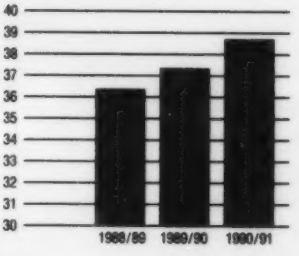

Service Hours (millions)



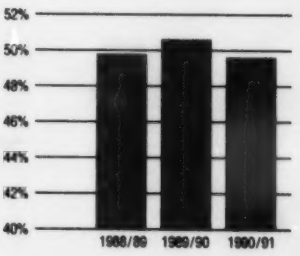

Operating Cost per Service Hour




Passengers per Service Hour




Revenue as a % of Operating Cost



KET · HOTEL

# Consolidated Financial Statements
# Year ended March 31, 1991

## *Report of Management*

The management and Board of Directors of BC Transit is responsible for the consolidated financial statements appearing in this annual report. The consolidated statements were prepared in accordance with accounting principles appropriate for BC Transit and fairly represent the transactions and financial position of the corporation.

BC Transit's system of internal accounting controls is designed to provide reasonable assurance that assets are safeguarded, transactions are properly recorded and executed in accordance with management's authorization, and the books and records accurately reflect the disposition of assets. Inherent to the concept of reasonable assurance is the recognition that there are limits in all internal control systems and that system costs should not exceed the expected benefits. The system includes the selection, training and development of qualified personnel, organizational division of responsibilities and communications of company policies and procedures. The system is reviewed and evaluated by a program of internal audits.

The Audit Committee of the Board of Directors meets regularly with the internal auditors to discuss their audit work, accounting policy views, adequacy of internal accounting controls and the quality of financial reporting.

## *Auditors' Report*

To the Members of the Board of Directors of British Columbia Transit:

We have audited the consolidated balance sheet of British Columbia Transit as at March 31, 1991 and the consolidated statements of revenue and expenditures and accumulated net revenue, contributed surplus and changes in financial position, and the statement of changes in regional transit funds for the year then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of British Columbia Transit as at March 31, 1991 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Peat Marwick Thorne
Chartered Accountants
Vancouver, Canada
May 13, 1991

# Consolidated Balance Sheet

| | March 31 1991 ($000) | 1990 ($000) |
|---|---|---|
| *ASSETS* | | |
| *CURRENT ASSETS* | | |
| Short-term investments | $ 4,660 | $ 2,342 |
| Accounts receivable | | |
| Province of British Columbia | 22,082 | 18,750 |
| Municipalities | 26,488 | 23,195 |
| Sundry | 2,527 | 2,379 |
| Mortgage Receivable | 460 | 502 |
| Parts inventory | 11,273 | 9,900 |
| Prepaid expenditures | 4,047 | 2,892 |
| | 71,537 | 59,960 |
| | 106,740 | 77,060 |
| *LONG-TERM DEBT SINKING FUND* | | |
| *FIXED ASSETS* | | |
| SkyTrain (note 3) | 1,157,935 | 1,144,652 |
| Land, buildings and equipment (note 4) | 293,931 | 260,883 |
| | 1,451,866 | 1,405,535 |
| | $ 1,630,143 | $ 1,542,555 |
| *REGIONAL TRANSIT FUNDS* | | |
| Cash and term deposits | $ 40,748 | $ 44,001 |
| Accounts receivable and accrued interest | 5,660 | 4,874 |
| | $ 46,408 | $ 48,875 |

APPROVED BY THE BOARD:

Director E. N. J. Clarke

Director

| | March 31 1991 ($000) | 1990 ($000) |
|---|---|---|
| *LIABILITIES, EQUITY AND FUND BALANCES* | | |
| *CURRENT LIABILITIES* | | |
| Cheques issued in excess of funds on deposit | $ 6,238 | $ 547 |
| Accounts payable and accrued liabilities | 94,513 | 81,188 |
| Payable to contractors | 1,734 | 3,076 |
| Notes payable (note 5) | 189,324 | 210,641 |
| Current portion of long-term debt | 20,477 | 18,292 |
| Current obligations under capital leases | 6,329 | 6,117 |
| | 318,615 | 319,861 |
| *LONG-TERM DEBT (note 6)* | 902,208 | 806,001 |
| *OBLIGATIONS UNDER CAPITAL LEASES (note 7)* | 203,610 | 209,885 |
| *EQUITY* | | |
| Contributed surplus | 198,224 | 201,405 |
| Accumulated net revenue | 7,486 | 5,403 |
| | 205,710 | 206,808 |
| | $ 1,630,143 | $ 1,342,555 |
| Payable to BC Transit | $ 23,540 | $ 20,341 |
| Fund Balances | 22,868 | 28,534 |
| | $ 46,408 | $ 48,875 |

# Consolidated Statement of Revenue and Expenditures and Accumulated Net Revenue

| | Year ended March 31 | |
|---|---|---|
| | 1991 ($000) | 1990 ($000) |
| ***REVENUE*** | | |
| Operations | $ 138,773 | $ 125,843 |
| Interest | 9,600 | 7,751 |
| | 148,373 | 133,594 |
| ***EXPENDITURES*** | | |
| Operations and maintenance | 231,203 | 203,138 |
| Administration | 42,680 | 37,004 |
| Interest on long-term debt | 96,832 | 92,482 |
| Interest on obligations under capital leases | 23,618 | 23,773 |
| Other interest | 21,141 | 421 |
| Depreciation and amortization | 42,174 | 33,453 |
| Property leases and taxes | 6,606 | 5,545 |
| | 464,254 | 395,816 |
| | (315,881) | (262,222) |
| ***RECOVERIES*** | | |
| Contributions from the Province of British Columbia | 173,061 | 139,473 |
| Contributions from municipalities | 99,503 | 81,087 |
| Provincial grant – debt servicing assistance | 40,327 | 38,927 |
| Amortization of contributed surplus to offset depreciation charged on contributed assets | 2,990 | 2,735 |
| | 315,881 | 262,222 |
| ***NET REVENUE FROM TRANSIT OPERATIONS*** | – | – |
| ***OTHER*** | | |
| Realization of contributed surplus on disposition of contributed assets | 191 | 795 |
| Gain (loss) on disposal of fixed assets | (229) | 447 |
| Loss on disposal of inventory | (8) | (15) |
| Net income from insurance operations | 2,129 | 1,572 |
| | 2,083 | 2,799 |
| ***NET REVENUE*** | 2,083 | 2,799 |
| Accumulated net revenue at beginning of year | 5,403 | 2,604 |
| ***ACCUMULATED NET REVENUE AT END OF YEAR*** | $ 7,486 | $ 5,403 |

# Consolidated Statement of Contributed Surplus

| | Year ended March 31 | |
|---|---|---|
| | 1991 ($000) | 1990 ($000) |
| *APPRAISAL INCREASE CREDITS* | | |
| Balance at beginning of year | $ 182,312 | $ 185,870 |
| Amount transferred to statement of revenue and expenditures and accumulated net revenue to offset depreciation charged on contributed assets | (2,990) | (2,735) |
| Reduction on disposition of contributed assets | (191) | (823) |
| | 179,131 | 182,312 |
| *OTHER CONTRIBUTED SURPLUS* | | |
| Balance at beginning of year | 19,093 | 19,065 |
| Increase on disposition of contributed assets | – | 28 |
| | 19,093 | 19,093 |
| *BALANCE AT END OF YEAR* | $ 198,224 | $ 201,405 |

# Consolidated Statement of Changes in Financial Position

| | Year ended March 31 1991 ($000) | 1990 ($000) |
|---|---|---|
| *CASH PROVIDED BY (USED FOR):* | | |
| *OPERATIONS* | | |
| Net revenue | $ 2,083 | $ 2,799 |
| Items not involving cash | | |
| Depreciation and amortization | 42,174 | 33,453 |
| Amortization of bond discount | (208) | 793 |
| Amortization of contributed surplus to offset depreciation charged on contributed assets | (2,990) | (2,735) |
| Realization of contributed surplus on disposition of contributed assets | (191) | (795) |
| Loss (gain) on disposal of fixed assets | 229 | (447) |
| | 41,097 | 33,068 |
| Changes in non-cash operating working capital | | |
| Accounts receivable | (5,773) | (6,143) |
| Parts inventory | (1,373) | (443) |
| Prepaid expenditures | (1,155) | 819 |
| Accounts payable and accrued liabilities | 11,983 | 8,621 |
| | 43,779 | 35,922 |
| *FINANCING* | | |
| Principal repayments on capital leases | (6,063) | (5,589) |
| Increase (decrease) in | | |
| Notes payable | (21,317) | 43,196 |
| Long-term debt | 98,600 | 21,608 |
| Long-term debt sinking fund | (29,680) | (24,171) |
| Decrease in mortgage receivable | 42 | 55 |
| | 41,582 | 35,099 |
| *INVESTMENTS* | | |
| Short-term investments | (2,318) | (2,342) |
| Proceeds from sale of fixed assets | (13) | 4,427 |
| Additions to | | |
| SkyTrain | (47,449) | (44,766) |
| Land, buildings and equipment | (41,272) | (27,563) |
| | (91,052) | (70,244) |
| *INCREASE (DECREASE) IN CASH DEFICIENCY* | 5,691 | (777) |
| Cash deficiency at beginning of year | 547 | 1,324 |
| *CASH DEFICIENCY AT END OF YEAR* | $ 6,238 | $ 547 |

## Statement of Changes in Regional Transit Funds

| | Vancouver ($000) | Victoria ($000) | Year ended March 31 1991 Total ($000) | 1990 Total ($000) |
|---|---|---|---|---|
| *FUND BALANCE AT BEGINNING OF YEAR* | $ 24,577 | $ 3,957 | $ 28,534 | $ 16,165 |
| Revenue | | | | |
| Gas tax | 45,197 | – | 45,197 | 47,636 |
| Non-residential property tax | 22,623 | – | 22,623 | 21,247 |
| Power levy | 10,452 | 4,254 | 14,706 | 14,278 |
| Interest earned | 5,012 | 579 | 5,591 | 4,988 |
| | 83,284 | 4,833 | 88,117 | 88,149 |
| | 107,861 | 8,790 | 116,651 | 104,314 |
| Contribution to shareable deficit | (89,482) | (4,301) | (93,783) | (75,780) |
| *FUND BALANCE AT END OF YEAR* | $ 18,379 | $ 4,489 | $ 22,868 | $ 28,534 |

# Notes to Consolidated Financial Statements
## Year ended March 31, 1991

### 1. *Authority*

British Columbia Transit ("BC Transit") is established under the British Columbia Transit Act, as amended, to operate the urban transit systems in the Province of British Columbia.

In accordance with the Vancouver and Victoria Regional Transit Commission regulations, BC Transit is responsible for the administration of all funds raised by certain tax levies. The financial position and changes during the year in these funds are set out in the Consolidated Balance Sheet and in the Statement of Changes in Regional Transit Funds.

### 2. *Summary of Significant Accounting Policies*

The accompanying financial statements are prepared in accordance with generally accepted accounting principles appropriate for BC Transit. The significant accounting policies are set out hereunder:

(a) Basis of presentation
These consolidated financial statements include the accounts of BC Transit and its wholly owned subsidiary, BC Transit Captive Insurance Company Inc., which was formed to provide certain types of insurance coverage solely to BC Transit.

(b) Parts inventory
Parts inventory is valued at the lower of average cost and replacement value.

(c) Fixed assets
Fixed assets have been recorded as follows:

(i) Fixed assets transferred from the Province of British Columbia in fiscal year 1980, at their appraised value at June 30, 1979.

(ii) Revenue vehicles acquired from B.C. Hydro, at their appraised value at March 1, 1980.

(iii) SeaBuses, the South Shore and North Shore SeaBus Terminals, acquired from the Province of British Columbia, at appraised values. At August 18, 1987 the SeaBuses were reappraised by Robert Allan Ltd., as a result of which, fixed assets and contributed surplus were both increased by $1,950,000. The other appraisals were carried out at various dates between July 15, 1980 and June 30, 1981.

2. *Summary of Significant Accounting Policies (continued)*

(c) Fixed assets (continued)

(iv) The trolley overhead system acquired from B.C. Hydro on January 1, 1984 at its nominal value of $1.

(v) Land, land improvements, buildings and equipment acquired from B.C. Hydro at appraised value. These appraisals were carried out at various dates between April 1, 1980 and April 1, 1982.

All appraisals are fair market value appraisals with the exception of the appraisal of buildings and land improvements, which are appraised at depreciated replacement cost.

(vi) All other fixed assets, at cost, including capitalized interest as indicated in note 2(d).

(vii) Depreciation and amortization are provided on the basis that results in a matching of these charges with BC Transit's statutory power to recover the cost of the related assets. Contributed assets are not subject to recovery and are depreciated over their estimated useful lives by the sinking fund method. All assets are depreciated over a period not exceeding their estimated remaining useful lives.

(d) Capitalization of interest
Interest, incurred in connection with capital acquisitions from the date of advance of funds until the assets are placed in service for transit purposes, is capitalized. Interest of $4,457,000 (1990, $21,359,000) was capitalized during the year ended March 31, 1991.

(e) Amortization of bond discounts
Bond discounts are amortized on a straight-line basis over the term of the debt.

(f) Amortization of contributed surplus
Contributed surplus (appraisal increase credits) is being amortized and reflected in net revenue at an amount equal to the depreciation charged on those assets for which BC Transit does not have statutory power to obtain full recovery from operations.

*3. SkyTrain*

| | 1991 | | | 1990 |
|---|---|---|---|---|
| | Carrying value ($000) | Accumulated depreciation and amortization ($000) | Net ($000) | Net ($000) |
| Vancouver-New Westminster Phase | | | | |
| Property and rights-of-way | $ 37,779 | $ – | $ 37,779 | $ 37,976 |
| Vehicles and equipment under capital lease | 159,502 | 13,208 | 146,294 | 149,486 |
| Construction, engineering and administration | 813,784 | 99,621 | 714,163 | 745,140 |
| | 1,011,065 | 112,829 | 898,236 | 932,602 |
| New Westminster-Scott Road Phase | | | | |
| Property and rights-of-way | 13,041 | – | 13,041 | 13,041 |
| Construction, engineering and administration | 189,452 | 4,695 | 184,757 | 181,669 |
| | 202,493 | 4,695 | 197,798 | 194,710 |
| Capital projects in progress | | | | |
| Scott Road-Whalley Phase | 29,413 | – | 29,413 | 6,365 |
| Coquitlam Phase | 578 | – | 578 | 389 |
| Vehicles | 31,910 | – | 31,910 | 10,586 |
| | 61,901 | – | 61,901 | 17,340 |
| | $1,275,459 | $ 117,524 | $1,157,935 | $ 1,144,652 |

SkyTrain carrying values set up above include costs of $849,432,000 (1990, $854,385,000) and capitalized interest of $161,633,000 (1990, $161,575,000) for the Vancouver-New Westminster phase. Costs of $157,218,000 (1990, $149,435,000) and capitalized interest of $45,275,000 (1990,$45,275,000) are included for the New Westminster-Scott Road phase.

At March 31, 1991 BC Transit has unutilized approved funding for the Whalley extension of $102,139,000 (excluding interest) of which $38,882,000 has been committed, and unutilized approved funding for the purchase of SkyTrain vehicles of $11,982,000 of which $5,817,000 has been committed.

## 4. *Land, Buildings and Equipment*

| | 1991 | | | 1990 |
|---|---|---|---|---|
| | Carrying value ($000) | Accumulated depreciation and amortization ($000) | Net ($000) | Net ($000) |
| Land | $ 48,794 | $ – | $ 48,794 | $ 48,794 |
| Land improvements | 12,592 | 1,726 | 10,866 | 11,208 |
| Buildings | 65,298 | 5,913 | 59,385 | 59,245 |
| Revenue vehicles | 83,423 | 22,522 | 60,901 | 40,227 |
| Revenue vehicles under capital leases | 91,652 | 21,009 | 70,643 | 74,190 |
| Equipment | 24,069 | 2,805 | 21,264 | 16,930 |
| Capital projects in progress | 22,078 | – | 22,078 | 10,289 |
| | $ 347,906 | $ 52,975 | $ 293,931 | $ 260,883 |

At March 31, 1991 BC Transit has unutilized approved funding for the purchase of revenue vehicles of $37,918,000, of which $36,316,000 has been committed.

## 5. *Notes Payable*

| | 1991 ($000) | 1990 ($000) |
|---|---|---|
| Commercial paper with the Province of British Columbia, 12.14% weighted average interest rate | $ 189,324 | $ 210,641 |

In May, 1991, commercial paper aggregating $50,000,000 was repaid with the proceeds of a debenture due in 1998.

## 6. *Long-term Debt*

| | 1991 ($000) | 1990 ($000) |
|---|---|---|
| Debentures, 11.02% weighted-average interest rate, due November 25, 1997 to July 10, 2009 | $ 845,046 | $ 745,046 |
| 11.125% Bond payable, due December 1, 1998 | 50,000 | 50,000 |
| 8.75% Bond payable, due January 15, 2009 | 25,000 | 25,000 |
| | 920,046 | 820,046 |
| Less unamortized bond discount | 9,961 | 9,753 |
| | 910,085 | 810,293 |
| 12.25% Serial debenture, principal of $1,400,000 plus interest payable annually, due January 31, 1996. | 12,600 | 14,000 |
| | 922,685 | 824,293 |
| Less current portion | 20,477 | 18,292 |
| | $ 902,208 | $ 806,001 |

Long-term debt is guaranteed by the Province of British Columbia.

Effective April 1, 1986, BC Transit entered into an agreement whereby the Province of British Columbia makes grants of principal and interest payments on $275,000,000 of the long-term debt, representing approximately 50% of the SkyTrain guideway and station construction costs for the Vancouver-New Westminster phase. In 1991 these payments aggregated $40,327,000 (1990, $38,927,000).

Sinking fund and serial debenture payments due in each of the next five years are approximately as follows ($000):

| | |
|---|---|
| 1992 | $20,477 |
| 1993 | 20,477 |
| 1994 | 20,477 |
| 1995 | 20,477 |
| 1996 | 26,077 |

## 7. *Obligations under Capital Leases*

The obligations under capital leases, which mature at various dates from 1994 to 2007, represent the total present value of future minimum lease payments discounted at the interest rates implicit in the leases at the commencement of the lease term. These rates vary with prime and during the year ranged from 8.27% to 13.8%.

Obligations under capital leases totalling approximately $205,125,000 are guaranteed by the Province of British Columbia.

Future minimum lease payments together with the balance of the obligations under capital leases as of March 31, 1991 are approximately as follows ($000):

| | |
|---|---|
| 1992 | $ 28,916 |
| 1993 | 29,465 |
| 1994 | 30,425 |
| 1995 | 29,224 |
| 1996 | 28,846 |
| 1997 - 2007 | 274,354 |
| | 421,230 |
| Less interest amount | 211,291 |
| | 209,939 |
| Less current portion | 6,329 |
| | $ 203,610 |

*Photos*

Jeff Barber: *Page 31 (bottom), 32, 33 (top), 39 (top)*
Sharon Doucette: *Page 22 (bottom)*
Mits Naga: *Cover photo*
Kent Kallberg: *Pages 4, 6 (except Mayor Coell), 7, 8, 10, 12, 15, 17 (bottom), 20, 24*
Karen Leach: *Pages 13, 16 (left), 28 (bottom)*
Paul Little: *Pages 9, 22 (centre)*
Scott MacFarlane: *Page 18 (top)*
Theresa Magee: *Pages 14 (bottom), 17 (top), 19 (top), 27 (top), 29*
Hans Sipma: *Page 21*
Joanne Stone: *Page 33 (centre)*
Mark Van Manen: *Pages 2, 3, 11, 14 (top), 18 (bottom), 22 (top), 25, 26 (left), 27 (bottom), 28 (top), 30, 36, 37, 38, 39 (bottom), 42*
Anita Wasiuta: *Pages 31 (top), 33 (bottom), 34, 35*
John Yanyshyn: *Page 5*

*Production*

Karen Leach: *writer/editor*
Chris Foord: *contributing writer*
Ian MacLeod: *design*
Theresa Magee: *production*
Zenith Graphics: *type assembly*
Press prep and printing: *Hemlock*

British Columbia Cataloguing in Publication Data
BC Transit
Annual Report – 1982/83 –
Continues: British Columbia. Urban Transit Authority. Annual Report.
Report year ends March 31
ISSN 0825-8252 = Annual Report - BC Transit
1. BC Transit - Periodical.
2. Local Transit - British Columbia - Periodicals.
HE 4508

*Head Office*

Airport Square
1200 West 73rd Avenue,
Vancouver,
British Columbia,
V6P 6M2

Printed in Canada
on environmentally friendly oxygen-bleached paper.